

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-100938-1

Client Project/Site: Frewsburg Site #907016

For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Maurice Moore



Authorized for release by:

6/14/2016 5:17:20 AM

Orlette Johnson, Senior Project Manager

(484)685-0864

orlette.johnson@testamericainc.com

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Results relate only to the items tested and the sample(s) as received by the laboratory.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.



Orlette Johnson
Senior Project Manager
6/14/2016 5:17:20 AM

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Definitions/Glossary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-100938-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-100938-1

Job ID: 480-100938-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-100938-1

Receipt

The samples were received on 6/1/2016 12:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-100938-1

Client Sample ID: OUTFALL 001

Lab Sample ID: 480-100938-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.3		1.0	0.81	ug/L	1			8260C	Total/NA
Trichloroethene	0.71	J	1.0	0.46	ug/L	1			8260C	Total/NA
Iron	3.3	B	0.050	0.019	mg/L	1			200.7 Rev 4.4	Total/NA
Oil & Grease	5.3		5.2	1.5	mg/L	1			1664A	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil	Fac	D	Method	Prep Type
Total Suspended Solids	22.0		4.0	4.0	mg/L	1			SM 2540D	Total/NA

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-100938-2

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-100938-1

Client Sample ID: OUTFALL 001

Lab Sample ID: 480-100938-1

Date Collected: 05/31/16 16:15

Matrix: Water

Date Received: 06/01/16 12:05

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			06/08/16 14:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/08/16 14:34	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			06/08/16 14:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			06/08/16 14:34	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			06/08/16 14:34	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			06/08/16 14:34	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			06/08/16 14:34	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			06/08/16 14:34	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			06/08/16 14:34	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			06/08/16 14:34	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			06/08/16 14:34	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			06/08/16 14:34	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			06/08/16 14:34	1
2-Butanone (MEK)	ND		10	1.3	ug/L			06/08/16 14:34	1
2-Hexanone	ND		5.0	1.2	ug/L			06/08/16 14:34	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			06/08/16 14:34	1
Acetone	ND		10	3.0	ug/L			06/08/16 14:34	1
Benzene	ND		1.0	0.41	ug/L			06/08/16 14:34	1
Bromodichloromethane	ND		1.0	0.39	ug/L			06/08/16 14:34	1
Bromoform	ND		1.0	0.26	ug/L			06/08/16 14:34	1
Bromomethane	ND		1.0	0.69	ug/L			06/08/16 14:34	1
Carbon disulfide	ND		1.0	0.19	ug/L			06/08/16 14:34	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			06/08/16 14:34	1
Chlorobenzene	ND		1.0	0.75	ug/L			06/08/16 14:34	1
Dibromochloromethane	ND		1.0	0.32	ug/L			06/08/16 14:34	1
Chloroethane	ND		1.0	0.32	ug/L			06/08/16 14:34	1
Chloroform	ND		1.0	0.34	ug/L			06/08/16 14:34	1
Chloromethane	ND		1.0	0.35	ug/L			06/08/16 14:34	1
cis-1,2-Dichloroethene	1.3		1.0	0.81	ug/L			06/08/16 14:34	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			06/08/16 14:34	1
Cyclohexane	ND		1.0	0.18	ug/L			06/08/16 14:34	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			06/08/16 14:34	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/08/16 14:34	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			06/08/16 14:34	1
Isopropylbenzene	ND		1.0	0.79	ug/L			06/08/16 14:34	1
Methyl acetate	ND		2.5	1.3	ug/L			06/08/16 14:34	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			06/08/16 14:34	1
Methylcyclohexane	ND		1.0	0.16	ug/L			06/08/16 14:34	1
Methylene Chloride	ND		1.0	0.44	ug/L			06/08/16 14:34	1
Styrene	ND		1.0	0.73	ug/L			06/08/16 14:34	1
Tetrachloroethene	ND		1.0	0.36	ug/L			06/08/16 14:34	1
Toluene	ND		1.0	0.51	ug/L			06/08/16 14:34	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			06/08/16 14:34	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			06/08/16 14:34	1
Trichloroethene	0.71 J		1.0	0.46	ug/L			06/08/16 14:34	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			06/08/16 14:34	1
Vinyl chloride	ND		1.0	0.90	ug/L			06/08/16 14:34	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/08/16 14:34	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-100938-1

Client Sample ID: OUTFALL 001

Lab Sample ID: 480-100938-1

Date Collected: 05/31/16 16:15

Matrix: Water

Date Received: 06/01/16 12:05

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		71 - 126		06/08/16 14:34	1
1,2-Dichloroethane-d4 (Surr)	97		66 - 137		06/08/16 14:34	1
4-Bromofluorobenzene (Surr)	101		73 - 120		06/08/16 14:34	1
Dibromofluoromethane (Surr)	98		60 - 140		06/08/16 14:34	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	3.3	B	0.050	0.019	mg/L	-	06/02/16 09:20	06/02/16 17:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	5.3		5.2	1.5	mg/L	-	06/03/16 15:45	06/03/16 21:44	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	22.0		4.0	4.0	mg/L	-		06/05/16 13:48	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-100938-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-100938-2

Date Collected: 05/31/16 00:00

Matrix: Water

Date Received: 06/01/16 12:05

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			06/08/16 15:01	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/08/16 15:01	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			06/08/16 15:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			06/08/16 15:01	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			06/08/16 15:01	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			06/08/16 15:01	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			06/08/16 15:01	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			06/08/16 15:01	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			06/08/16 15:01	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			06/08/16 15:01	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			06/08/16 15:01	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			06/08/16 15:01	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			06/08/16 15:01	1
2-Butanone (MEK)	ND		10	1.3	ug/L			06/08/16 15:01	1
2-Hexanone	ND		5.0	1.2	ug/L			06/08/16 15:01	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			06/08/16 15:01	1
Acetone	ND		10	3.0	ug/L			06/08/16 15:01	1
Benzene	ND		1.0	0.41	ug/L			06/08/16 15:01	1
Bromodichloromethane	ND		1.0	0.39	ug/L			06/08/16 15:01	1
Bromoform	ND		1.0	0.26	ug/L			06/08/16 15:01	1
Bromomethane	ND		1.0	0.69	ug/L			06/08/16 15:01	1
Carbon disulfide	ND		1.0	0.19	ug/L			06/08/16 15:01	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			06/08/16 15:01	1
Chlorobenzene	ND		1.0	0.75	ug/L			06/08/16 15:01	1
Dibromochloromethane	ND		1.0	0.32	ug/L			06/08/16 15:01	1
Chloroethane	ND		1.0	0.32	ug/L			06/08/16 15:01	1
Chloroform	ND		1.0	0.34	ug/L			06/08/16 15:01	1
Chloromethane	ND		1.0	0.35	ug/L			06/08/16 15:01	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			06/08/16 15:01	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			06/08/16 15:01	1
Cyclohexane	ND		1.0	0.18	ug/L			06/08/16 15:01	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			06/08/16 15:01	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/08/16 15:01	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			06/08/16 15:01	1
Isopropylbenzene	ND		1.0	0.79	ug/L			06/08/16 15:01	1
Methyl acetate	ND		2.5	1.3	ug/L			06/08/16 15:01	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			06/08/16 15:01	1
Methylcyclohexane	ND		1.0	0.16	ug/L			06/08/16 15:01	1
Methylene Chloride	ND		1.0	0.44	ug/L			06/08/16 15:01	1
Styrene	ND		1.0	0.73	ug/L			06/08/16 15:01	1
Tetrachloroethene	ND		1.0	0.36	ug/L			06/08/16 15:01	1
Toluene	ND		1.0	0.51	ug/L			06/08/16 15:01	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			06/08/16 15:01	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			06/08/16 15:01	1
Trichloroethene	ND		1.0	0.46	ug/L			06/08/16 15:01	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			06/08/16 15:01	1
Vinyl chloride	ND		1.0	0.90	ug/L			06/08/16 15:01	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/08/16 15:01	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-100938-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-100938-2

Date Collected: 05/31/16 00:00

Matrix: Water

Date Received: 06/01/16 12:05

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	94		71 - 126		06/08/16 15:01	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	96		66 - 137		06/08/16 15:01	1
<i>4-Bromofluorobenzene (Surr)</i>	101		73 - 120		06/08/16 15:01	1
<i>Dibromofluoromethane (Surr)</i>	100		60 - 140		06/08/16 15:01	1

Surrogate Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-100938-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	TOL (71-126)	12DCE (66-137)	BFB (73-120)	DBFM (60-140)
480-100938-1	OUTFALL 001	95	97	101	98
480-100938-2	TRIP BLANK	94	96	101	100
LCS 480-305567/5	Lab Control Sample	95	96	99	98
MB 480-305567/7	Method Blank	95	96	96	98

Surrogate Legend

TOL = Toluene-d8 (Surr)

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-100938-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-305567/7

Matrix: Water

Analysis Batch: 305567

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			06/08/16 11:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/08/16 11:41	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			06/08/16 11:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			06/08/16 11:41	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			06/08/16 11:41	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			06/08/16 11:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			06/08/16 11:41	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			06/08/16 11:41	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			06/08/16 11:41	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			06/08/16 11:41	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			06/08/16 11:41	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			06/08/16 11:41	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			06/08/16 11:41	1
2-Butanone (MEK)	ND		10	1.3	ug/L			06/08/16 11:41	1
2-Hexanone	ND		5.0	1.2	ug/L			06/08/16 11:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			06/08/16 11:41	1
Acetone	ND		10	3.0	ug/L			06/08/16 11:41	1
Benzene	ND		1.0	0.41	ug/L			06/08/16 11:41	1
Bromodichloromethane	ND		1.0	0.39	ug/L			06/08/16 11:41	1
Bromoform	ND		1.0	0.26	ug/L			06/08/16 11:41	1
Bromomethane	ND		1.0	0.69	ug/L			06/08/16 11:41	1
Carbon disulfide	ND		1.0	0.19	ug/L			06/08/16 11:41	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			06/08/16 11:41	1
Chlorobenzene	ND		1.0	0.75	ug/L			06/08/16 11:41	1
Dibromochloromethane	ND		1.0	0.32	ug/L			06/08/16 11:41	1
Chloroethane	ND		1.0	0.32	ug/L			06/08/16 11:41	1
Chloroform	ND		1.0	0.34	ug/L			06/08/16 11:41	1
Chloromethane	ND		1.0	0.35	ug/L			06/08/16 11:41	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			06/08/16 11:41	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			06/08/16 11:41	1
Cyclohexane	ND		1.0	0.18	ug/L			06/08/16 11:41	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			06/08/16 11:41	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/08/16 11:41	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			06/08/16 11:41	1
Isopropylbenzene	ND		1.0	0.79	ug/L			06/08/16 11:41	1
Methyl acetate	ND		2.5	1.3	ug/L			06/08/16 11:41	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			06/08/16 11:41	1
Methylcyclohexane	ND		1.0	0.16	ug/L			06/08/16 11:41	1
Methylene Chloride	ND		1.0	0.44	ug/L			06/08/16 11:41	1
Styrene	ND		1.0	0.73	ug/L			06/08/16 11:41	1
Tetrachloroethene	ND		1.0	0.36	ug/L			06/08/16 11:41	1
Toluene	ND		1.0	0.51	ug/L			06/08/16 11:41	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			06/08/16 11:41	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			06/08/16 11:41	1
Trichloroethene	ND		1.0	0.46	ug/L			06/08/16 11:41	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			06/08/16 11:41	1
Vinyl chloride	ND		1.0	0.90	ug/L			06/08/16 11:41	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/08/16 11:41	1

TestAmerica Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-100938-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		71 - 126		06/08/16 11:41	1
1,2-Dichloroethane-d4 (Surr)	96		66 - 137		06/08/16 11:41	1
4-Bromofluorobenzene (Surr)	96		73 - 120		06/08/16 11:41	1
Dibromofluoromethane (Surr)	98		60 - 140		06/08/16 11:41	1

Lab Sample ID: LCS 480-305567/5

Matrix: Water

Analysis Batch: 305567

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	27.4		ug/L		110	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.7		ug/L		103	70 - 126
1,1,2-Trichloroethane	25.0	26.2		ug/L		105	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.7		ug/L		115	52 - 148
1,1-Dichloroethane	25.0	25.9		ug/L		104	71 - 129
1,1-Dichloroethene	25.0	27.8		ug/L		111	58 - 121
1,2,4-Trichlorobenzene	25.0	25.6		ug/L		102	70 - 122
1,2-Dibromo-3-Chloropropane	25.0	25.4		ug/L		101	56 - 134
1,2-Dichlorobenzene	25.0	25.2		ug/L		101	80 - 124
1,2-Dichloroethane	25.0	26.2		ug/L		105	75 - 127
1,2-Dichloropropane	25.0	25.2		ug/L		101	76 - 120
1,3-Dichlorobenzene	25.0	24.9		ug/L		100	77 - 120
1,4-Dichlorobenzene	25.0	24.8		ug/L		99	75 - 120
2-Butanone (MEK)	125	127		ug/L		101	57 - 140
2-Hexanone	125	119		ug/L		95	65 - 127
4-Methyl-2-pentanone (MIBK)	125	118		ug/L		95	71 - 125
Acetone	125	160		ug/L		128	56 - 142
Benzene	25.0	25.8		ug/L		103	71 - 124
Bromodichloromethane	25.0	27.3		ug/L		109	80 - 122
Bromoform	25.0	27.2		ug/L		109	52 - 132
Bromomethane	25.0	20.9		ug/L		83	55 - 144
Carbon disulfide	25.0	27.9		ug/L		112	59 - 134
Carbon tetrachloride	25.0	28.4		ug/L		113	72 - 134
Chlorobenzene	25.0	25.5		ug/L		102	72 - 120
Dibromochloromethane	25.0	27.4		ug/L		110	75 - 125
Chloroethane	25.0	20.8		ug/L		83	69 - 136
Chloroform	25.0	26.7		ug/L		107	73 - 127
Chloromethane	25.0	22.7		ug/L		91	68 - 124
cis-1,2-Dichloroethene	25.0	26.9		ug/L		107	74 - 124
cis-1,3-Dichloropropene	25.0	26.6		ug/L		106	74 - 124
Cyclohexane	25.0	24.8		ug/L		99	59 - 135
Dichlorodifluoromethane	25.0	26.3		ug/L		105	59 - 135
Ethylbenzene	25.0	25.8		ug/L		103	77 - 123
1,2-Dibromoethane	25.0	26.2		ug/L		105	77 - 120
Isopropylbenzene	25.0	25.3		ug/L		101	77 - 122
Methyl acetate	125	120		ug/L		96	74 - 133
Methyl tert-butyl ether	25.0	26.6		ug/L		106	64 - 127
Methylcyclohexane	25.0	25.8		ug/L		103	61 - 138
Methylene Chloride	25.0	28.4		ug/L		114	57 - 132
Styrene	25.0	25.8		ug/L		103	70 - 130
Tetrachloroethene	25.0	25.5		ug/L		102	74 - 122
Toluene	25.0	25.1		ug/L		100	80 - 122
trans-1,2-Dichloroethene	25.0	27.0		ug/L		108	73 - 127

TestAmerica Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-100938-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-305567/5

Matrix: Water

Analysis Batch: 305567

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	25.0	26.8		ug/L		107	72 - 123
Trichloroethene	25.0	25.8		ug/L		103	74 - 123
Trichlorofluoromethane	25.0	26.3		ug/L		105	62 - 152
Vinyl chloride	25.0	23.6		ug/L		94	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	95		71 - 126
1,2-Dichloroethane-d4 (Surr)	96		66 - 137
4-Bromofluorobenzene (Surr)	99		73 - 120
Dibromofluoromethane (Surr)	98		60 - 140

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-304673/1-A

Matrix: Water

Analysis Batch: 304909

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 304673

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.0222	J	0.050	0.019	mg/L		06/02/16 09:20	06/02/16 16:27	1

Lab Sample ID: LCS 480-304673/2-A

Matrix: Water

Analysis Batch: 304909

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 304673

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	10.12		mg/L		101	85 - 115

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 480-305021/1-A

Matrix: Water

Analysis Batch: 305064

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 305021

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		06/03/16 15:45	06/03/16 21:44	1

Lab Sample ID: LCS 480-305021/2-A

Matrix: Water

Analysis Batch: 305064

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 305021

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	40.0	40.62		mg/L		102	78 - 114

TestAmerica Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-100938-1

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-305129/1

Matrix: Water

Analysis Batch: 305129

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.0	1.0	mg/L			06/05/16 13:48	1

Lab Sample ID: LCS 480-305129/2

Matrix: Water

Analysis Batch: 305129

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	245	246.8		mg/L		101	88 - 110

QC Association Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-100938-1

GC/MS VOA

Analysis Batch: 305567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-100938-1	OUTFALL 001	Total/NA	Water	8260C	
480-100938-2	TRIP BLANK	Total/NA	Water	8260C	
LCS 480-305567/5	Lab Control Sample	Total/NA	Water	8260C	
MB 480-305567/7	Method Blank	Total/NA	Water	8260C	

Metals

Prep Batch: 304673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-100938-1	OUTFALL 001	Total/NA	Water	200.7	
LCS 480-304673/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-304673/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 304909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-100938-1	OUTFALL 001	Total/NA	Water	200.7 Rev 4.4	304673
LCS 480-304673/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	304673
MB 480-304673/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	304673

General Chemistry

Prep Batch: 305021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-100938-1	OUTFALL 001	Total/NA	Water	1664A	
LCS 480-305021/2-A	Lab Control Sample	Total/NA	Water	1664A	
MB 480-305021/1-A	Method Blank	Total/NA	Water	1664A	

Analysis Batch: 305064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-100938-1	OUTFALL 001	Total/NA	Water	1664A	305021
LCS 480-305021/2-A	Lab Control Sample	Total/NA	Water	1664A	305021
MB 480-305021/1-A	Method Blank	Total/NA	Water	1664A	305021

Analysis Batch: 305129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-100938-1	OUTFALL 001	Total/NA	Water	SM 2540D	
LCS 480-305129/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 480-305129/1	Method Blank	Total/NA	Water	SM 2540D	

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-100938-1

Client Sample ID: OUTFALL 001

Date Collected: 05/31/16 16:15

Date Received: 06/01/16 12:05

Lab Sample ID: 480-100938-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	305567	06/08/16 14:34	SMY	TAL BUF
Total/NA	Prep	200.7			304673	06/02/16 09:20	CMM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	304909	06/02/16 17:27	AMH	TAL BUF
Total/NA	Prep	1664A			305021	06/03/16 15:45	DSC	TAL BUF
Total/NA	Analysis	1664A		1	305064	06/03/16 21:44	DSC	TAL BUF
Total/NA	Analysis	SM 2540D		1	305129	06/05/16 13:48	EKB	TAL BUF

Client Sample ID: TRIP BLANK

Date Collected: 05/31/16 00:00

Date Received: 06/01/16 12:05

Lab Sample ID: 480-100938-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	305567	06/08/16 15:01	SMY	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-100938-1

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-17

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Method Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-100938-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
1664A	HEM and SGT-HEM	1664A	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF

Protocol References:

1664A = EPA-821-98-002

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-100938-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-100938-1	OUTFALL 001	Water	05/31/16 16:15	06/01/16 12:05
480-100938-2	TRIP BLANK	Water	05/31/16 00:00	06/01/16 12:05

TestAmerica Buffalo

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record



480-100938 Chain of Custody

Client Information Client Contact: Thomas Palmer Company: Groundwater & Environmental Services Inc		Lab PM: Johnson, Orlette S E-Mail: orlette.johnson@testamericainc.com		Carrier Tracking: 480-100938 Chain of Custody Page 1 of 1 Job #:	
Address: 495 Aero Drive Suite 3 City: Cheektowaga State: NY, 14225 Phone:		Due Date Requested: TAT Requested (days): 10 Days PO #: CallOut ID 126536 WO #:		Analysis Requested 2540D - Total Suspended Solids 1664A - Calc - Oil & Grease 200.7 - Total Fe Perform MS/MSD (Yes or No)	
Email: tpalmer@gesonline.com Project Name: Frewsburg Site#90701 Site:		Sample Date: 5-31-16 Sample Time: 1615 Sample Type (C=Comp, G=grab): G Matrix (W=Water, S=Solid, O=Other): Water		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Z - other (specify)	
Sample Identification Outfall 001 Trip Blank		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No)		Total Number of Containers Special Instructions/Note:	
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological					
Deliverable Requested: I, II, III, IV, Other (specify) Empty Kit Relinquished by:					
Relinquished by: [Signature] Date/Time: 5-31-16 1900		Relinquished by: [Signature] Date/Time: 6-1-16 1905		Relinquished by: [Signature] Date/Time:	
Relinquished by: [Signature] Date/Time:		Relinquished by: [Signature] Date/Time:		Relinquished by: [Signature] Date/Time:	
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: #1 316	

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-100938-1

Login Number: 100938

List Source: TestAmerica Buffalo

List Number: 1

Creator: Wallace, Cameron

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	False	